

**ABSTRACT**

An improved battery, monitoring circuit and method for communicating with the battery is provided. Such batteries and communication methods are particularly useful in UPS systems that use such batteries to provide back-up power to electrical loads. In one  
5 aspect, performance, manufacturing, trend and/or other data are stored in non-volatile memory of the battery and are communicated to an external system such as a UPS. In another aspect, a method for communicating via single-wire interface is provided. In one aspect, a same interface is used to communicate with both conventional batteries and improved batteries having increased monitoring capabilities.